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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,799	11/13/2003	Enzo Ingriselli	C-3145	4203
7590 02/22/2007 M. P. Williams 210 Main Street Manchester, CT 06040			EXAMINER THOMPSON, MELISSA	
			ART UNIT 1745	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			02/22/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/713,799

Applicant(s)

INGRISELLI ET AL.

Examiner

Melissa B. Thompson

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1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Claims 1-3 are pending;
2. The previous 102 rejections based on Sato have been withdrawn since the reference is not prior art as of its filing date. Claims 1-3 are rejected for reasons given below.

### ***Specification***

3. The abstract of the disclosure is objected to because it mentions oxidant inlet/outlet manifolds. However, the rest of the abstract discusses fuel inlet/outlet manifolds and it is unclear how the oxidant inlet/outlet manifolds relate to the fuel inlet/outlet manifold. Correction is required. See MPEP § 608.01(b).

### ***Claim Objections***

4. Claim 2 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 2 does not appear to limit claim 1 since it is inherent that the reactant gas inlet/outlet manifold is a fuel inlet/outlet manifold since a fuel plumbing arrangement is interconnected between a reactant gas supply pipe and the inlet and outlet manifold inlets as recited in claim 1.

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

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art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the fuel inlet/outlet manifold, does not reasonably provide enablement for oxidant inlet/outlet manifold. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims. It is unclear how the fuel cell would work if the reactant gas inlet/outlet manifold was the oxidant inlet/outlet manifold based on Figure 1. The fuel cell wouldn't work as claimed because it is unclear how the fuel would be pumped into the fuel cell if the reactant inlet/outlet manifold were an oxidant inlet/outlet manifold. It is unclear based on Figure 1, how the oxidant is introduced into the fuel cell when only the fuel inlet/outlet manifold is shown. As seen in Figure 1, only one reactant gas inlet/outlet manifold is shown, leaving it unclear how another reactant gas would be pumped into the fuel cell without another reactant gas inlet/outlet manifold.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Sugita et al. (U.S. Patent Number 6,613,470 B1).

Sugita et al. disclose a fuel cell system that comprises first and second fuel cell stacks that are arranged in parallel to one another (column 3, lines 46-49). A piping mechanism (28, in Figure 1) is used to supply and discharge a fuel gas, an oxygen-containing gas, and a cooling medium with respect to the first and second fuel cell stacks (column 3, lines 56-59). Sugita et al. disclose what is interpreted to be a first manifold (24), a second manifold (26), and a turn manifold (behind the brackets 190) in Figure 1. The first manifold is connected to the second manifold through the plumbing arrangement shown in Figure 1. The turn manifold is connected to the reactant gas manifold through the same plumbing arrangement (192a and 192b in Figure 1). As seen in Figure 16, brackets (204 and 202) cover the oxygen-containing gas inlets and fuel gas outlets (column 9, lines 6-8), acting as a seal to close off the manifolds. The piping mechanism connects the fuel gas outlets and the oxygen-containing gas inlets of each fuel cell stack (Figures 1 and 16). As seen in Figure 1, the tubes are contoured to fit the manifolds, this inherently shows that the tubing is a flexible material that has the ability to be shaped.

#### ***Response to Arguments***

9. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

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**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa B. Thompson whose telephone number is (571) 272-2758. The examiner can normally be reached on Monday through Friday from 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Trainer, Susy Tsang-Foster can be reached on (571) 272-1293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**SUSYTSANG-FOSTER  
PRIMARY EXAMINER**

MBT

